

Statement under PCT Article 19(1)

As generally recited in claim 1 of the present application, the present invention has a feature of inserting into a program watermark verification code that prevents the program from operating correctly when watermark information is tampered with. In particular, claim 1 recites a feature of making the watermark verification code identical regardless of the distribution destination.

By this means, when programs in which watermark information and watermark verification code are inserted by the same method are subjected to a collusion attack, it is difficult to identify the verification code inserted in these programs.

As a result, even when the location of an electronic watermark inserted in a program is identified by the above collusion attack and this portion is tampered with, it is not possible to identify the verification code inserted and operate the program accurately.

The present invention thus prevents tampering of electronic watermarks by collusion attack.

By contrast with the present invention, the COLLBERG reference discloses a method that embeds a unique identification number as watermark, per distribution destination. In addition, when an electronic watermark is tampered with, the method detects the tampering and adds tamper-proofing code that prevents the execution

of the program.

In other words, the method of the COLLBERG reference inserts tamper-proofing code, which is equivalent to the verification code of the present invention.

5 In addition, as generally recited in claim 10 of the present application, the present invention obfuscates other portions than where an electronic watermark is inserted in a program and thereby makes it difficult to identify the location in the program where the electronic
10 watermark is inserted even when programs for different distribution destinations are compared. By this means, it is possible to prevent tampering of electronic watermarks by collusion attack on programs.

By contrast with the above-noted feature of the
15 present invention, the PALSBERG reference discloses a method that obfuscates code for generating electronic watermarks and a program with an electronic watermark including code for generating electronic watermarks, and thereby makes it difficult to specify the code for
20 generating electronic watermarks and prevents tampering of electronic watermarks.